

NGChem 2022

Next Generation Chemists – La parola ai giovani



Venue

Sala congressi (Aula Balzano) asse didattico di Medicina
Cittadella Universitaria di Monserrato
S.P. 8 km 0.700, 09042, Monserrato, Cagliari

Conference Programme

Friday 4th November 2022

08:30	Registration
09:30	Opening
09:45	Invited talk: Stefano Cinti, Università di Napoli Federico II
10:15	Sponsor presentation: Luca Pala, Fluorsid S.p.A.
10:30	Coffee break & poster session
11:00	Young Chemists communications - Session <i>Avogadro</i>
13:00	Lunch
14:15	Sponsor presentation: Paolo Sessa, Perkin Elmer/AIM s.a.s
14:30	Invited talk: Evelina Colacino, Università di Montpellier
15:00	Young Chemists communications - Session <i>Bohr</i>
16:10	Coffee break & poster session
16:40	Young Chemists communications - Session <i>Curie</i>
17:40	Roundtable
19:00	Closure

Saturday 5th November 2022

09:00	Invited talk: Marta Da Pian, Elsevier
09:30	Young Chemists communications - Session <i>De Lavoisier</i>
10:50	Coffee break & poster session
11:15	Young Chemists communications - Session <i>Ehrlich</i>
12:35	Sponsor presentation: Luigi Pisani, GNR S.r.l
12:50	Awards and closure

Friday, 4th November 2022, 08:30 - 19:00

08:30 - Registration

09:30 - Opening

09:45 - Invited Talk: Stefano Cinti, Università di Napoli Federico II

Serve comunicare la chimica ai cittadini? Sì, ma come?

10:15 - Sponsor presentation: Luca Pala, Fluorsid S.p.A.

10:30 - Coffee Break & Poster Session

11:00 - Young Chemists Communications - Session Avogadro

OA1. Rosita Cappai: "A Multi-Technique approach of thermodynamic study of oxidovanadium (IV) with kojic acid derivatives"

OA2. Davide Schirone: "Rational formulation of a more sustainable household cleaning product"

OA3. Karolina Krautforst: "Bioactive pigments from marine algae encapsulated in cubosomes for pharmaceutical application"

OA4. Claudio Cara: "Fluorine recovery from electrolytic baths of primary aluminium production"

OA5. Massimo Milia: "Influence of different light sources on the biochemical composition of *Arthrospira* spp. Grown in model systems"

OA6. Italo Cirone: "*C.Elegans*: at the crossroads between cellular and murine models"

OA7. Matteo Aroffu: "DOTAP-liposomes as efficient system for nasal vaccination"

OA8. Marco Fornasier: "Shedding light on lipid-protein interactions: alpha-synuclein binding to lipid membranes"

OA9. Francesco Basoccu: "Nitroso Derivatives: a Curse or a Benefit?"

OA10. Vanessa Rosciardi: "PVA-based hydrogels with active biocidal effect: from polymer functionalization to real-time observation of the gels' efficacy against model bacteria through Confocal Laser Microscopy."

OA11. Monica Mura: "Specific buffer effects on DNA melting temperatures and the interactions with supported phospholipid bilayers"

OA12. Maria Chiara Cabua: "Preparation, characterization and chemical functionalization of microcrystalline cellulose from Aloe plant waste"

13:00 - Lunch

14:15 - Sponsor Presentation: Paolo Sessa, Perkin Elmer/AIM s.a.s.

14:30 - Invited Talk: Evelina Colacino, Università di Montpellier

Assessing Quantitatively the Greenness of Mechanochemical Processes with the DOZN 2.0 Tool: Application to the synthesis of active pharmaceutical ingredients

15:00 - Young Chemists Communications - Session *Bohr*

- OB1. Gavino Bassu:** "Fast and Bacterious: diffusivity study of bacteria in confining hydrogel"
- OB2. Ilenia Lupinu:** "Design and development of new VEGFR/microtubule dual inhibitors for the treatment of metastatic cancers"
- OB3. Ilaria Clemente:** "Biocompatible hydrogel beads as formulates for treatment of soils: synthesis and characterization"
- OB4. Federica Fulgheri:** "Coloading of artemisin with curcumin or quercetin in nutriosomes to improve the oral therapy of malaria"
- OB5. Ada Raucci:** "Towards precision agriculture: development of on-glove electrochemical tool copper monitoring"
- OB6. Luca Cappai:** "Synthesis and activity of Olivine-based materials for photochemical conversion of CO₂ into valuable products"
- OB7. Andrea Mara:** "Influence of intermittent irrigation methods on the chemical nature of arsenic species in rice grain"

16:10 - Coffee break & Poster Session

16:40 - Young Chemists Communications - Session *Curie*

- OC1. Michael Zanon:** "DLP 3D-printing of sustainable chitosan hydrogels using Quinizarin-based functional "bio-dyes" for tissue engineering applications"
- OC2. Daniela Secci:** "Exploring new potential scaffolds for the selective inhibition of human Carbonic Anhydrase IX and XII"
- OC3. Fausto Secci:** "Design of innovative mesostructured bifunctional catalysts for CO₂ conversion to dimethyl ether"
- OC4. Giammarco Meloni:** "Non-noble metal complexes with NHC-phenolate ligands: new catalysts for the CO₂ chemical valorization"
- OC5. Sara Demartis:** "Reservoir-type 3D printed implantable devices to sustain the long-term release of Rose Bengal in localised cancer therapy"
- OC6. Marzia Mureddu:** "Effect of ball milling on the microstructure and piezoelectric properties of BCZT ceramics prepared by low-temperature solid state route"

17:40 - Roundtable: "SUSTAINABLE CHEMISTRY: can academia and industry join forces to build a better future?"

Panelists: Andrea Porcheddu (UNICA), Gabriele Mulas (UNISS), Alessandro Falchi (Chiesi Farmaceutici), Matteo Caprioli (Nativa), Giovanni Sanna (Matrica), Luca Baraccani (Matrica)

19:00 Closure

Saturday, 5th November 2022, 09:00 – 13:00

09:00 - Invited talk: **Marta Da Pian, Elsevier**

Speak Data - when good results might not be enough

09:30 - Young Chemists communications - Session *De Lavoisier*

OD1. Paola Carta: “Theoretical study of functionalized silica-based mesostructured sorbents for gas sweetening”

OD2. Alberto Luridiana: “HAT-mediated XAT for metallaphotocatalyzed cross-electrophile coupling and 1,2-dicarbonyl functionalization of Olefins”

OD3. Davide Moi: “Aminotriazoloquinazoline- and Aminotriazolo- based hydroxamic acids are novel potent and selective HDAC6 inhibitors with subnanomolar activity”

OD4. Giulio Casula: “ARXPS for investigating the surface functionalization of fresh cleaved gold”

OD5. Noelia Nieto González: “Oral suspension administration via paediatric nasogastric tube - an in vitro evaluation”

OD6. Davide Tocco: “An investigation of conformational changes and location of BSA upon immobilization within zeolitic imidazolate frameworks (ZIF-8 and ZIF-zni)”

OD7. Jessica Milia: “Switching-on fluorescence by copper (II) and basic anions: a case study with a pyrene-functionalized squaramide”

OD8. Giada Mannias: “Innovative and green perspectives of iron(III) trimesate Metal-Organic Frameworks via mechanochemical and sonochemical approaches”

10:50 - Coffee break & poster session

11:15 - Young Chemists communications - Session *Ehrlich*

OE1. Luca Casula: “Nanosuspensions as a formulation strategy to boost the delivery of poorly soluble drugs”

OE2. Luciano Atzori: “Cu/Zn/Me/Zr/Si (Me = Mg, Ce, La) Soft-templated catalysts for CO₂ hydrogenation to methanol”

OE3. Rodolfo Esposito: “The rational use of new eco-friendly wetting agents in chemical formulations”

OE4. Mariangela Oggianu: “A thermally/chemically robust and easily regenerable anilato-based ultramicroporous 3D MOF for CO₂ uptake and separation”

OE5. Antonella Miglione: “Lateral flow assay powered by electroanalysis”

OE6. Stefania Peddio: “Sardinian and Italian *Phaseolus vulgaris* cultivar as source of bioactive compounds: alpha amylase inhibitor and alpha glucosidase inhibitor”

OE7. Stefano Barranco: “Stereoselective synthesis of novel heterocyclic β -amino cyclobutane carboxylic amides”

OE8. Mert Acar: “Effects of electrolytes on the enzymatic activity in urea/urease system”

12:35 Sponsor presentation: **Luigi Pisani, GNR S.r.l.**

12:50 Awards and closure